

PTO/SB/08B (Modified)

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3-21-03

Substitute for form 1449B/PTO		Complete if Known	
		Application Number	09/009,294
		Filing Date	01/20/1998
		First Named Inventor	Mills
		Group Art Unit	1745 <i>ATTACH TO #52</i>
		Examiner Name	Kalafut
Sheet	1	of	<i>7</i>
		Attorney Docket Number	62-226-8A2

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		H. Conrads, R. Mills, Th. Wrubel, "Emission in the Deep Vacuum Ultraviolet from an Incandescently Driven Plasma in a Potassium Carbonate Cell", <i>Plasma Sources Science and Technology</i> , submitted.	<i>FAX RECEIVED MAR 13 2002 GROUP 1700</i>
		R. L. Mills, P. Ray, "Stationary Inverted Lyman Population Formed from Incandescently Heated Hydrogen Gas with Certain Catalysts", <i>Chem. Phys. Lett.</i> , submitted.	
		R. L. Mills, B. Dhandapani, J. He, "Synthesis and Characterization of a Highly Stable Amorphous Silicon Hydride", <i>Int. J. Hydrogen Energy</i> , submitted.	
		R. L. Mills, A. Voigt, B. Dhandapani, J. He, "Synthesis and Characterization of Lithium Chloro Hydride", <i>Int. J. Hydrogen Energy</i> , submitted.	
		R. L. Mills, P. Ray, "Substantial Changes in the Characteristics of a Microwave Plasma Due to Combining Argon and Hydrogen", <i>New Journal of Physics</i> , submitted.	
		R. L. Mills, P. Ray, "High Resolution Spectroscopic Observation of the Bound-Free Hyperfine Levels of a Novel Hydride Ion Corresponding to a Fractional Rydberg State of Atomic Hydrogen", <i>Int. J. Hydrogen Energy</i> , in press.	
		R. L. Mills, E. Dayalan, "Novel Alkali and Alkaline Earth Hydrides for High Voltage and High Energy Density Batteries", <i>Proceedings of the 17th Annual Battery Conference on Applications and Advances</i> , California State University, Long Beach, CA, (January 15-18, 2002), in press.	
		R. Mayo, R. Mills, M. Nansteel, "On the Potential of Direct and MHD Conversion of Power from a Novel Plasma Source to Electricity for Microdistributed Power Applications", <i>IEEE Transactions on Plasma Science</i> , submitted.	

Examiner Signature	<i>S. Kalafut</i>	Date Considered	<i>6/4/03</i>
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		R. Mills, P. Ray, J. Dong, M. Nansteel, W. Good, P. Jansson, B. Dhandapani, J. He, "Excessive Balmer Line Broadening, Power Balance, and Novel Hydride Ion Product of Plasma Formed from Incandescently Heated Hydrogen Gas with Certain Catalysts", Int. J. Hydrogen Energy, submitted	<i>FAX RECEIVED MARCH 13 2002 GROUP 1700 Official</i>
		R. Mills, E. Dayalan, P. Ray, B. Dhandapani, J. He, "Highly Stable Novel Inorganic Hydrides from Aqueous Electrolysis and Plasma Electrolysis", Japanese Journal of Applied Physics, submitted	
		R. L. Mills, P. Ray, B. Dhandapani, J. He, "Comparison of Excessive Balmer Line Broadening of Glow Discharge and Microwave Hydrogen Plasmas with Certain Catalysts", Chem. Phys., submitted	
		R. L. Mills, P. Ray, B. Dhandapani, J. He, "Spectroscopic Identification of Fractional Rydberg States of Atomic Hydrogen", J. of Phys. Chem. (letter), submitted	
		R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "New Power Source from Fractional Rydberg States of Atomic Hydrogen", Chem. Phys. Letts., submitted	
		R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "Spectroscopic Identification of Transitions of Fractional Rydberg States of Atomic Hydrogen", Quantitative Spectroscopy and Energy Transfer, submitted	
		R. L. Mills, P. Ray, B. Dhandapani, M. Nansteel, X. Chen, J. He, "New Power Source from Fractional Quantum Energy Levels of Atomic Hydrogen that Surpasses Internal Combustion", Spectrochimica Acta, Part A, submitted	
		R. L. Mills, P. Ray, "Spectroscopic Identification of a Novel Catalytic Reaction of Rubidium Ion with Atomic Hydrogen and the Hydride Ion Product", Int. J. Hydrogen Energy, in press.	

Examiner Signature	<i>GK/M</i>	Date Considered	<i>3/9/03</i>
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		R. Mills, J. Dong, W. Good, P. Ray, T. He, B. Dhandapani, "Measurement of Energy Balances of Noble-Gas-Hydrogen Discharge Plasmas Using Calvet Calorimetry", Int. J. Hydrogen Energy, in press.	
		R. L. Mills, A. Voigt, P. Ray, M. Nansteel, B. Dhandapani, "Measurement of Hydrogen Balmer Line Broadening and Thermal Power Balances of Noble Gas-Hydrogen Discharge Plasmas", Int. J. Hydrogen Energy, in press.	
		R. Mills, P. Ray, "Vibrational Spectral Emission of Fractional-Principal-Quantum-Energy-Level Hydrogen Molecular Ion", Int. J. Hydrogen Energy, in press.	
		R. Mills, P. Ray, "Spectral Emission of Fractional Quantum Energy Levels of Atomic Hydrogen from a Helium-Hydrogen Plasma and the Implications for Dark Matter", Int. J. Hydrogen Energy, Vol. 27, No. 3, (2002) pp. 301-322.	
		R. Mills, P. Ray, "Spectroscopic Identification of a Novel Catalytic Reaction of Potassium and Atomic Hydrogen and the Hydride Ion Product", Int. J. Hydrogen Energy, Vol. 27, No. 2, (2002), pp. 183-192.	
OK		R. Mills, "BlackLight Power Technology-A New Clean Hydrogen Energy Source with the Potential for Direct Conversion to Electricity", Proceedings of the National Hydrogen Association, 12 th Annual U.S. Hydrogen Meeting and Exposition, Hydrogen: The Common Thread, The Washington Hilton and Towers, Washington DC, (March 6-8, 2001), pp. 671-697.	
		Keith-Keefer, Ph.D., "Interim Report on BlackLight Power Technology-Its Apparent Scientific Basis, State of Development and Suitability for Commercialization by Liebert Corporation."	
OK		R. Mills, "The Grand Unified Theory of Classical Quantum Mechanics," (2001), Distributed by Amazon.Com.	

Examiner Signature	<i>87 Kalafut</i>	Date Considered	6/4/03
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MAR 13 2002
GROUP 100
Official

PTO/SB/08A (Modified)

<p>Substitute for form 1449A/PTO</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p>		<i>Complete if Known</i>	
		Application Number	09/009,294
		Filing Date	01/20/1998
		First Named Inventor	Mills
		Group Art Unit	1745
		Examiner Name	Kalafut
Sheet 4	of 7	Attorney Docket Number	62-226-8A2

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST. 3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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		Filing Date	01/20/1998
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Sheet <u>5</u>	of <u>11</u>	Attorney Docket Number <u>62-226-8A2</u>	

OTHER PRIOR ART — NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
OK		Radavanov, et. al. "Ion Kinetic-Energy Distributions and Balmer- α Excitation in Ar-H ² Radio-Frequency Discharges" J. Appl. Phys. Vol. 78, No. 2, pp. 746-756, July 1995.	
OK		Thorne, et. al., "Recombination during the Electrolysis of Light Water in 0.6 M K ₂ CO ₃ Can It Account for the Reports of Excess Heat?" Departments of Physics and Chemistry, Brigham Young University, June 1993.	MAR 13 2002 FAX RECEIVED GROUP 1700
OK		Bush, "A Light Water Excess Heat Reaction Suggests That 'Cold Fusion' May Be 'Alkali-Hydrogen Fusion', Fusion Technology, Vol. 22, Sept. 1992, pp. 301-322	
OK		Beiser, A. Concepts of Modern Physics, Fourth Edition, McGraw-Hill Book Company New York, 1978, p. 407.	
OK		Boniface, et. al. "Calorimetry for a Ni/K ₂ CO ₃ Cell." AECL Research, June 1994.	Offic... Offic...
OK		Bradford. "A Calorimetric Investigation of the Reaction of Hydrogen with Sample PSU #1." A Confidential Report submitted to Hydrocatalysis Power Corporation, September 1994.	
OK		Clark, et. al. "Excess Energy Cell Final Report." April 1995.	
OK		Evans, et. al. "Time-of-Flight Secondary Ion Mass Spectroscopy (TOF-SIMS) Surface Analysis Report." CE & A Number 40150, March 1994.	
OK		Evans, et. al. "XPS/ESCA Results." CE & A Number 44545, Nov 1994.	
OK		Gernert, et. al. "Anomalous Heat From Atomic Hydrogen in Contact with Potassium Carbonate." Thermacore, Inc.	
OK		Haus. "On the radiation from point charges." American Journal of Physics, Vol 54, No 12, December 1986. Pp. 1126-1129.	

Examiner Signature		Date Considered	6/4/03
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¹EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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OK		Jansson. "Hydrocatalysis: A New Energy Paradigm for the 21 st Century." A Thesis, Master of Science in Engineering Degree in the Graduate Division of Rowan University, May 1997.	
OK		Jacox, et. al. "INEL XPS Report." Idaho National Engineering Laboratory, Idaho, Inc., Nov 1993.	EX-13 GROUP 7700 MAR 13 2002
OK		Karaplus and Porter. <i>Atoms and Molecules: An Introduction for Students of Physical Chemistry</i> , The Benjamin/Cummings Publishing Company, Menlo Park, California, 1970, p. 567.	
OK		Kline-Anderson, Inc. "Review of Schedule and Resource Requirements to Develop a Hydrocatalysis Functional Prototype Unit." Final Report for Technology Insights, Oct 1996.	
OK		Kurtz, et. al. "Report on Calorimetric Investigations of Gas-Phase Catalyzed Hydrogen Formation." Hydrocatalysis Power Corp. Report, December 1996.	
OK		Peterson. "Evaluation of Heat Production from Light Water Electrolysis Cell of Hydrocatalysis Power Corporation." Draft, Westinghouse STC, Feb 1994.	
OK		Phillips, et. al. "Additional Calorimetric Examples of Anomalous Heat From Physical Mixture of K/Carbon and PD/Carbon." Consulting Report, Jan 1996.	
OK		Technology Insights. "Draft: Hydrocatalysis Technical Assessment." PACIFICORP, Aug 1996.	
OK		Thermacore, Inc. "SBIR Phase I Nascent Hydrogen: An Energy Source." Final Report, March 1994.	
OK		Weisskopf, V.F. "Recent developments in the theory of the electron." <i>Reviews of Modern Physics</i> , Vol 21, No 2, 1949, pp. 305-315.	

Examiner Signature	EJ Kalafut	Date Considered	6/4/03
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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

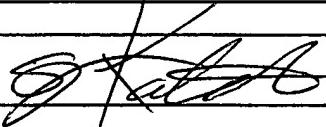
Sheet **1**of **7**

<i>Complete if Known</i>	
Application Number	09/009,294
Filing Date	January 20, 1998
First Named Inventor	Mills
Group Art Unit	1745
Examiner Name	Kalafut
Attorney Docket Number	62-226-8A2

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JK		Barton, et al, "Investigating Radio Frequency Plasmas Used for the modification of Polymer Surfaces." <i>J. Phys. Chem. B</i> , Vol 103, 1999, pp. 4423-4430.	
OK		Bogaerts, et al. "Effects of adding hydrogen to an argon glow discharge: overview of relevant processes and some qualitative explanations." <i>Journal of Analytical Atomic Spectrometry</i> , March 2000.	
OK		Roberts, et al. "Hydrogen Balmer alpha line shapes for hydrogen-argon mixtures in a low-pressure rf discharge." <i>J. Appl. Phys.</i> , Vol 74, No 11, December 1993.	
OK		Videnovic, et al. "Spectroscopic investigations of a cathode fall region of the Grimm-type glow discharge." <i>Spectrochimica Acta Part B</i> , Vol 51, 1996, pp. 1707-1731.	
OK		Dery, et al. "Effect of Dielectric Constant, Cavities in Series and Cavities in Parallel on the Product Distribution of the Oligomerization of Methane via Microwave Plasmas." <i>J. Phys. Chem.</i> , Vol 100, 1996, pp. 17866-17872.	
JK		Keefer, Ph.D., "Interim Report on BlackLight Power Technology: Its Apparent Scientific Basis, State of Development and Suitability for Commercialization by Liebert Corporation."	

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Examiner Signature		Date Considered	JK/03
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